

REMARKS

Claims 1-18 and 20-23 are pending and stand ready for further action on the merits. Support for new claims 22-23 can be found on page 5, lines 25-31 of the present specification. No new matter has been added by way of the above-amendment.

Prior Art Based Issues

Claims 1-18 and 20-21 are rejected under 35 U.S.C. 103(a) as obvious EP '764 in view of Deroover and Komamura. Applicant respectfully traverses the rejection.

Applicant respectfully submits that the present invention is not made obvious by the combination of EP '764, Deroover and Komamura. In support of Applicant's position, enclosed herewith is an executed Declaration under 37 CFR 1.132 by a skilled artisan, Mr. YASUDA (hereinafter the "Yasuda Declaration"). Details regarding the Declaration will be discussed below.

EP '764 describes photothermographic materials but fails to disclose heat-fusible solvents. Reference is made to parts of EP '764 in the Office Action, but these cited parts do not describe any of the following presently claimed features: a) a heat-fusible solvent; b) that the heat-fusible solvent is selected from the group consisting of urea derivatives, amide derivatives, sulfonamide derivatives, polyhydric alcohols and polyethylene glycols; and c)

that the heat fusible solvent and the hydrophobic thermoplastic organic binder are in a layer other than the image forming layer. Thus, EP '764 lacks disclosure of all claimed features.

The Examiner, aware of the deficiencies of EP '764, cites Deroover '263 in order to cure those deficiencies. Applicant respectfully submits that Deroover '263 fail to cure the deficiencies of EP '764.

Deroover '263 discloses a heat-fusible solvent may be used in the recording layer (column 11, lines 1-13), but is silent regarding the incorporation of the heat-fusible solvent into other layers. In addition, the Examiner states that Deroover '263 incorporates polyethylene wax as a heat-fusible solvent in the antihalation layer. First, there is no teaching or suggestion by Deroover '263 that the polyethylene wax is a "heat-fusible solvent." Second, the polyethylene wax is not one of the heat-fusible solvents which is explicitly recited in the present claims. Third, there is no teaching or suggestion by Deroover '263 to replace the polyethylene wax in the antihalation layer with at least one of a urea derivative, amide derivative, sulfonamide derivative, polyhydric alcohol and polyethylene glycol. Accordingly, Deroover '263 does not cure the deficiencies of EP '764.

The Examiner, aware of the deficiencies of EP '764 and Deroover '263, cites Komamura '698 in order to cure those deficiencies.

Applicant respectfully submits that Komamura '698 fail to cure the deficiencies of EP '764 and Deroover '263.

Komamura '698 generally states that a variety of heat-fusible solvents may be incorporated in various' layers of a photothermographic material (column 22, line 61 to column 23, line 31). Komamura '698 describes only one (1) working example using a heat-fusible solvent in which a heat-fusible solvent (compound unspecified) and gelatin are contained in the image forming layer. Since gelatin is not a hydrophobic and thermoplastic organic binder, the only working example does not satisfy the presently claimed feature of Claim 1. There is no particular teaching or suggestion that the claimed heat-fusible solvents are preferred, and incorporation of the heat-fusible solvents into a layer other than the image forming layer is not described as being preferred. Also, Komamura '698 does not teach or fairly suggest that the heat-fusible solvents are used in combination with a hydrophobic and thermoplastic organic binder, as presently claimed. Accordingly, Komamura '698 fails to cure the deficiencies of EP '764 and Deroover '263.

Applicant further submits that one having ordinary skill in the art would not be motivated or reasonably expect to be successful in combining the cited references in order to achieve the present invention. This is for the following reasons.

The Office Action states it would have been obvious to use the heat solvent of Deroover '263 and Komamura '698 in certain layers into the material of EP '764 (page 4 of the Office Action). However, Applicant first notes that Deroover '263 and Komamura '698 already have deficiencies themselves (see above), and the present invention would not be achieved anyway.

Second, one having ordinary skill in the art would not combine the primary EP '764 reference with the other cited references due to the teaching away present in EP '764. Any cited reference used for a rejection under 35 U.S.C. § 103(a) must be considered in its entirety, i.e., as a whole, including those portions that would lead away from a claimed invention. See *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). In other words, the EP '764 reference must be read in its entirety, including the teaching away that using certain binders will lead to drawbacks. Here, EP '764 specifically discloses that using photosensitive materials with gelatin, polyvinyl alcohol, polyacetal or other water-soluble polymers as the binder will lead to drawbacks, such as increased fog (see page 2, lines 45-48).

The secondary Komamura '698 reference discloses a heat-processible color photographic material having a silver halide, a reducing agent, a binder, and dye-providing material of formula (1) (see Abstract; Col. 2, lines 5-25). The binder can be gelatin,

gelatin derivatives, polyvinyl alcohol, or polyvinyl acetate (Col. 22, lines 28-38). The preferred binder in Komamura '698 is even a mixture that includes gelatin (Col. 22, lines 41-43).

Thus, one having ordinary skill in the art, upon reading the whole disclosure of EP '764, would not combine the primary EP '764 reference with Komamura '698 because EP '764 specifically describes the drawbacks of using gelatin, polyvinyl alcohol, and polyacetal as a binder. EP '764 specifically teaches one having ordinary skill in the art away from achieving the present invention, and that person having ordinary skill in the art would not refer to Komamura '698 because this reference discloses gelatin is a preferred binder, which leads to increased fog (as disclosed by EP '674). Thus, Applicant respectfully submits that the rejection under § 103(a) is overcome because the cited references have been improperly combined.

In addition, Applicant respectfully submits that the enclosed Yasuda Declaration describes experimental results which show that the inventive photothermographic material has unexpectedly superior properties to the materials of the cited references. The unexpected properties are associated with the fact that the inventive photothermographic material contains the heat-fusible solvent in a layer other than the image forming layer whereas the photothermographic material of the cited art contains the heat-fusible solvent in the image forming layer.

The data in the Yasuda Declaration indicates that the photothermographic material containing no heat-fusible solvent exhibits lower Dmax (sample A) and the photothermographic material containing the heat-fusible solvent in the image forming layer exhibits higher Dmin (sample C). This is in distinction to the inventive photothermographic material containing the heat-fusible solvent in the intermediate layer containing a hydrophobic and thermoplastic organic binder that shows both low Dmin and high developing speed (sample 1).

Based on the foregoing, Applicant respectfully submits that a *prima facie* case of obviousness cannot be said to exist, since the combination of EP '764, Deroover and Komamura fail to teach or fairly suggest a photothermographic material containing a heat-fusible solvent selected from the group consisting of urea derivatives, amide derivatives, sulfonamide derivatives, polyhydric alcohols and polyethylene glycols, wherein the heat fusible solvent and a hydrophobic thermoplastic organic binder are in a layer other than the image forming layer. In addition, even assuming *arguendo* that a *prima facie* case of obviousness were to exist, Applicant respectfully submits that the *prima facie* case would be overcome by the unexpectedly low Dmin and high developing speed of the inventive photothermographic material as described in the Yasuda Declaration. Accordingly, withdrawal of the rejection is respectfully requested.

Conclusion

In view of the above amendments and comments, Applicant respectfully submits that the claims are in condition for allowance. A notice to such effect is earnestly solicited.

If the Examiner has any questions concerning this application, he is requested to contact Garth M. Dahlen, Ph.D., Esq. (#43,575) at the offices of Birch, Stewart, Kolasch & Birch, LLP.

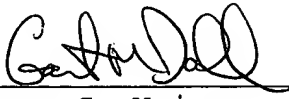
Pursuant to 37 C.F.R. § 1.17 and 1.136(a), Applicant respectfully petitions for a three (3) months extension of time for filing a response in connection with the present application. The required fee of \$950.00 is attached to a Request for Continued Examination (RCE) transmittal form which is cofiled herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Enclosed: the Yasuda Declaration